

BALTIMORE & OHIO RAILROAD, BALTIMORE BELT LINE, NORTH AVENUE BRIDGE HAER No. MD-203-A
Carrying West North Avenue over the Light Rail, CSX, Amtrak, Jones Falls, and Falls Road
Baltimore City
Maryland

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
Interior Region 1, North Atlantic - Appalachian
1234 Market Street, 20th Floor
Philadelphia, PA 19107

HISTORIC AMERICAN ENGINEERING RECORD
BALTIMORE & OHIO RAILROAD, BALTIMORE BELT LINE, NORTH AVENUE
BRIDGE
(North Avenue Bridge)

HAER No. MD-203-A

Location: Carrying West North Avenue over the Maryland Department of Transportation (MDOT) Maryland Transit Administration (MTA) Light Rail tracks, CSX Transportation (CSX) railroad tracks, Amtrak railroad tracks, the Jones Falls, and Falls Road, Baltimore City, Maryland.

The North Avenue Bridge is located at latitude: 39.3110841876, longitude: -76.6197352743. The coordinate represents the bridge's northeast corner. This coordinate was obtained on December 30, 2021, by plotting its location using the National Geodetic Survey website's Conversion and Transformation Tool. The coordinate's datum is North American Datum 1983. The North Avenue Bridge location has no restriction on its release to the public.

**Present Owner/
Occupant:** MDOT State Highway Administration.

Present Use: Vehicular and pedestrian bridge and railroad and light rail tunnel.

Significance: The North Avenue Bridge, built between 1891 and 1896, is a complex structure that is part of the Baltimore & Ohio (B&O) Railroad Baltimore Belt Line, a 7.2-mile railroad segment constructed between 1890 and 1895, that was part of a larger effort by the B&O to provide through service between Washington, DC, and New York City. The Belt Line allowed the B&O to connect its yards in Mount Clare on the west side of Baltimore to Bay View Junction on the east. The Belt Line was the first electrified railroad in the United States. The North Avenue Bridge is also a good example of a late nineteenth-century stone-arch bridge and late nineteenth-century bridge engineering.

Historian(s): Meghan P. White, Laura E. van Opstal, and Nicole A. Diehlmann, Rummel, Klepper, & Kahl (RK&K), LLP, 2022.

**Project
Information:** The North Avenue Bridge was recorded between November 2021 and March 2022 by RK&K, LLP, Baltimore, Maryland, for CSX Transportation (CSX). The recordation was undertaken pursuant to a stipulation of the *Memorandum of Agreement Among the Federal Railroad Administration, the Maryland State Historic Preservation*

Officer, the Pennsylvania State Historic Preservation Officer, the Maryland Department of Transportation Port Administration, and CSX Transportation Regarding the Howard Street Tunnel Project Baltimore City, Maryland and Delaware County, Pennsylvania (MOA). This MOA required only documentation of certain sections of the B&O Railroad Baltimore Belt Line and its contributing elements; thus, this documentation provides an overall description and history of the North Avenue Bridge but focuses on the relationship of the bridge to the B&O Railroad Baltimore Belt Line. Project personnel included RK&K historians Meghan P. White, Laura E. van Opstal, and Nicole A. Diehlmann and photographer Jet Lowe. The sponsor for the recordation is CSX. Cooperating agencies include the Federal Railroad Administration; the Maryland State Historic Preservation Officer; and the Maryland Department of Transportation (MDOT) Maryland Port Administration (MPA).

Part I. Historical Information

A. Physical History:

- 1. Date(s) of construction:** 1891-96, as documented in contemporary newspapers.
- 2. Architect/Engineer:** Frederick H. Smith, Chief Engineer, and John H. Milburn, Assistant Engineer for the City of Baltimore,¹ and Samuel Rea, Chief Engineer, Baltimore Belt Railroad Company. The City of Baltimore was responsible for the overall construction of the bridge, while Rea was instrumental in ensuring the North Avenue Bridge accommodated the needs of the Belt Line route through the Jones Falls Valley. Prior to working for the city, Smith was associated with the Baltimore Bridge Company. Rea spent most of his career working for various railroads, including the Pennsylvania Railroad (PRR) and the Pittsburgh, Virginia, and Charleston Railroad. As an assistant engineer, he helped with the construction of the 1877 Point Bridge, a chain suspension bridge over the Monongahela River in Pittsburgh and the construction of the Pittsburgh and Lake Erie Railroad. In 1879, he served as assistant engineer of the construction of the Pittsburgh, Virginia, and Charleston Railroad, and in 1888, he was made assistant to the PRR's second vice-president. In 1889, he resigned and joined the Belt Line project as vice-president of the Maryland Central Railroad and chief engineer of the Baltimore Belt Railroad Company, although ill health forced his resignation from work beginning in 1891. Rea returned to the PRR as assistant to the president in 1892, later serving in various vice-president roles until he was elected president of the company in 1912.²

¹ "North Avenue Bridge," *The Sun* (Baltimore, MD), June 1, 1896.

² "Blair County Holds Record as Maker of Great Railroad Presidents," *Altoona Tribune* (Altoona, PA), October 1, 1925.

3. **Builder/Contractor/Supplier:** L. B. McCabe and Brother, contractors.
4. **Original plans and construction:** The original construction plans have not been located; however, 1905 as-built plans, which were annotated in 1910 and 1911 and possibly 1952, show the bridge's original construction (see Figures 1a and 1b). The bridge was designed and constructed as a three-level, seven-span, stone-arch bridge. The superstructure contained the North Avenue roadway; the substructure spanned over the Northern Central Railway (NCR) tracks, B&O Railroad tracks, PRR tracks, the Jones Falls, and Falls Road on the middle level; and the Baltimore and Potomac (B&P) Tunnel at the lowest level, between the fourth and fifth arched openings (see Figure 2). The exterior was constructed from two types of cut coursed stone—small, dark irregularly coursed stone blocks on the westernmost end and regularly coursed, rock-faced limestone for the remainder. The tunnel arches were constructed of brick. The four west portals were 27'-0" wide and were clustered in pairs—the first two carrying the NCR tracks and the second two carrying the B&O Railroad tracks. The twin portals were identical with paired segmental arches lined by unevenly sized voussoirs. The three eastern arches were 130'-0" wide and spanned, from west to east, the PRR railroad tracks, the Jones Falls, and Falls Road. Each of these large arch barrels were skewed and constructed of coursed red brick ribs that fanned out to form a stepped surface. The arches rested on large stone piers. The B&P Tunnel portal extended at grade with the other Amtrak tracks beyond the south face of the bridge at an angle, jutting out from the bridge (see Figure 3). The arched portal was lined by irregularly spaced voussoirs. A cast-iron balustrade ran atop the bridge at street level. The sidewalks on North Avenue were paved with brick.
5. **Alterations and additions:** According to annotated as-built plans from 1905, in 1907 one of the B&O's arches was repaired.

According to a news article, in 1919, the brick sidewalks over North Avenue were replaced with concrete, and the road was paved with asphalt. The city's water department also installed a 0'-36" suction main beneath the south sidewalk.³

Between 1976 and 1977, the original cast-iron railings of the superstructure were removed, refinished, and put back into place on top of new concrete parapets. Other minor alterations added at an unknown time included application of shotcrete or gunite to and repointing of the interior of the tunnels carrying the B&O tracks through the North Avenue Bridge.⁴

The second tracks were removed at the North Avenue Bridge when the B&O single-tracked much of the Belt Line ca. 1960.

In 1984, CSX Transportation (formerly the B&O Railroad) sought to raise height

³ "Asphalt For Big Bridge," *The Sun* (Baltimore, MD), September 16, 1919.

⁴ Kerri Culhane, "North Avenue Bridge (SHA No. BC1208)," Maryland Inventory of Historic Places Record B-4521 (Crownsville, MD: Maryland Historical Trust, 1999) 1, IV-14.

restrictions on the Belt Line to accommodate multi-level automobile carriers following the expansion of the General Motors plant in southeast Baltimore. The tracks under the CSX portals of the North Avenue Bridge were moved to the center of the arch to allow for the height clearance.⁵

Ca. 2020, the innermost westbound vehicular traffic lane atop the North Avenue Bridge was converted into a protected bicycle lane.

As of 2022, alterations to the two CSX portals are proposed as part of a project to allow double stacking of freight trains along CSX's route between Baltimore and Philadelphia.

- B. Historical Context:** The North Avenue Bridge was constructed by the City of Baltimore. As part of the construction, the bridge accommodated the path of the B&O Railroad's Baltimore Belt Line, a railroad segment constructed between 1890 and 1895 in Baltimore, Maryland. The historical context for the Baltimore Belt Line can be found in HAER Report No. MD-203. The Belt Line was the most complicated part of the overall objective to providing service between Washington, DC, and New York. All other segments of the overall B&O project lacked the significant obstacles posed by the construction of the tunnel and the route through Baltimore City. As it compares to projects by competitors, it is unique because the primary competitor of the B&O was the Pennsylvania Railroad, which grew by acquisitions rather than new capital construction. The Pennsylvania Railroad acquired existing lines and associated infrastructure while the B&O undertook this massive-scale construction project.

History and Construction of the North Avenue Bridge

The North Avenue Bridge crosses the Jones Falls near what was the northern extent of the city between 1816 and 1888. During the eighteenth and early nineteenth centuries, the bridge area consisted of undeveloped woodland owned by the Rutter family. The vicinity had been improved with rail lines for the Baltimore and Susquehanna Railway (later the NCR) by the mid-nineteenth century. A 400'-0", five-span, iron-and-wood truss bridge with stone abutments and piers, completed in 1870, carried North Avenue over the Jones Falls and rail lines associated with the B&P Railroad and the NCR's Bolton Yard, a ca. 1832 freight yard at Bolton Station, located near the intersection of Mount Royal Avenue and Dolphin Street. An additional single-span portal, which was the eastern end of the B&P Tunnel, was constructed in 1873 west of the NCR tracks. By 1876, the city annexed land as far north as North Avenue. By the 1880s, the original bridge was deteriorating, and, in 1889, one 57'-0" truss collapsed. During the following year, the city began planning for the replacement of the bridge with a stone viaduct, but the design was complicated by the pending construction of the B&O Railroad's Baltimore Belt Line. The new bridge would have to cross not only the Jones Falls and Falls Road but also tracks for the B&O and NCR, as well as the B&P Tunnel. The bridge was designed so that each set of tracks could be accommodated without causing serious bottlenecks or compromising the structural integrity of the bridge or the B&P Tunnel. The successful construction of this bridge facilitated the continued use of a number of

⁵ "Belt Line Clearance Project," *The Sentinel* 6, no. 5 (September-October 1984): 7.

railroad lines, which were instrumental in connecting Baltimore with Washington, Philadelphia, and New York.⁶

In 1890, the *Sun* published an article by George C. Wilkins, general agent for the NCR, a subsidiary of the PRR, the B&O's primary competitor, calling for the realignment of the proposed Belt Line tracks over the NCR's Bolton Yard. The original plans called for the tracks of the Belt Line to cross seven Bolton Yard tracks at grade, then over the NCR passenger tracks and under North Avenue near the existing North Avenue Bridge. At the eastern end of the bridge, the proposal called for raising the grade from Maryland Avenue to a total of 166'-0". The NCR proposed instead a plan where the Belt Line tracks crossed just two tracks in Bolton Yard by shifting the location where the tracks would intersect in the yard. This would also minimize the impacts of increasing the grade of North Avenue in residential areas.⁷

In 1891, the *Sun* announced revisions to the new North Avenue Bridge design to avoid the seven NCR tracks at Bolton Yard. The newspaper noted that the B&O tracks would run under the west side of the bridge instead of the east side, which was originally proposed in the Belt Line ordinance. The NCR tracks were to be lowered, while the grade on North Avenue was to be raised west of the bridge.⁸

The North Avenue crossing has been described as a "complicated arrangement."⁹ To weave through the existing landscape features and infrastructure, the new bridge was constructed on a 10-degree curve (see Figure 4). The NCR and B&O tracks at the west end of the bridge had to pass under North Avenue through twin stone-arch tunnels and cross over the east portal of the B&P Tunnel; however, the B&P Tunnel roof was not strong enough to support the weight of the passing overhead trains. Samuel Rea, Chief Engineer of the Baltimore Belt Railroad Company, devised a creative solution where two additional plate girder bridge sections were constructed inside the bridge tunnels, creating "a unique, three-level street and rail crossing" (see Figures 5 and 6).¹⁰

The city hired L. B. McCabe and Brother as contractors for the North Avenue Bridge. The various alterations in design culminated in the contractors having to halt work temporarily on the new bridge in October 1894 while the City of Baltimore and the Baltimore Belt Railroad Company worked out payment for the bridge. The B&O owed the city \$9,000.00 for building the bridge piers and western approach abutment tall enough to carry North Avenue over the

⁶ Matt Bray, Nicole A. Diehlmann, Laura van Opstal, and Meghan P. White, "Howard Street Tunnel Project Architectural Historic Properties Identification and Effects Assessment Technical Report" (Baltimore, MD: RK&K, 2021), 31; Culhane 1999, IV-15; Herbert H. Harwood Jr., *Royal Blue Line* (Baltimore and London: Johns Hopkins University Press, 1990; repr. 2002), 88, 90.

⁷ "To the Honorable Mayor and City Council of the City of Baltimore," *The Sun* (Baltimore, MD), April 12, 1890, 1.

⁸ "Belt Railroad's Change of Plans in North Baltimore," *The Sun* (Baltimore, MD), April 14, 1891, 4.

⁹ Lawrence Lee, "Baltimore's Unseen Artery: A Brief History of the Baltimore Belt Railroad and its Howard Street Tunnel," in *Baltimore Civil Engineering History*, ed. Bernard G. Dennis Jr. and Matthew C. Fenton IV, P.E. (Reston, VA: American Society of Civil Engineers, 2004), 163-91.

¹⁰ Lee, "Baltimore's Unseen Artery," 168; M. Chris Manning, "B&O Railroad Baltimore Belt Line," Maryland Inventory of Historic Properties Record B-5287 (Crownsville, MD: Maryland Historical Trust, 2015), 3.

B&O tracks and to provide space for the protection of the B&P Tunnel below. In addition, the city's water department owed the city's bridge account \$9,000.00 because it had to construct 0'-30" water mains above the arches of the bridge, causing the bridge's height to increase 3'-0" and the project cost to increase. Overall, L. B. McCabe and Brother's contract totaled \$320,000.00. The original estimated cost of the bridge was \$394,000.00, but by 1894, the estimate had grown to almost \$500,000.00.¹¹ Troubles over payments continued into the spring of 1895, when the city inquired into the construction delay of the bridge's western approach. Charles Mayer, President of the B&O, authorized no more than \$104,000.00 for the construction, but the city's bridge engineer, Frederick H. Smith, argued that because the design plans had changed, the Belt Railroad Company should pay the expected increased cost.¹² Assistant City Commissioner Charles A. Hook was brought in as an arbitrator. He decided in July 1895 that the remainder the B&O owed the city was \$101,824.61. He also decided that the city and the railroad company were both equally responsible for the cost of the arches over the B&P Tunnel because the work was not in the original agreement for the construction.¹³

Construction continued while the city and the railroad argued over the cost. The electrified overhead rail that was to power the B&O trains was installed in September 1894. Two years later, in the spring 1896, the tracks of the existing railroad lines were removed on the western approach to fix the grading. In June, a marble block measuring 6'-0" long, 0'-18" wide, and 3'-0" high was placed at the corner of North Avenue and Oak Street (now Howard Street) and fitted with a bronze plaque commemorating the completion of the bridge, but it does not appear to be extant.¹⁴

Part II. Structural/Design Information

A. General Statement:

1. **Character:** The North Avenue Bridge is a good example of a complex stone and red-brick arch, multi-span bridge built by the City of Baltimore and the B&O Railroad. The 10-degree curve and multi-level design display the creative approach to accommodating the difficult terrain of the Jones Falls Valley and the needs of three different railroad lines.
2. **Condition of fabric:** The North Avenue Bridge is in good condition.

- B. Description:** The North Avenue Bridge is a three-level, seven-span, stone-arch bridge measuring 888'-0" long and 100'-0" wide. The exterior contains two types of cut coursed stone—small, dark irregularly coursed stone blocks on the westernmost end and regularly

¹¹ "North Avenue Bridge," *The Sun* (Baltimore, MD), October 13, 1894, 10; "Willing to Pay \$104,000," *The Sun* (Baltimore, MD), April 9, 1895, 10.

¹² "Willing to Pay \$104,000," *The Sun* (Baltimore, MD), April 9, 1895.

¹³ "Decided by Mr. Hook," *The Sun* (Baltimore, MD), July 3, 1895.

¹⁴ "The Belt Railroad," *The Sun* (Baltimore, MD), September 13, 1895; "North Avenue Bridge Tracks Removed," *The Sun* (Baltimore, MD), May 19, 1896; "North Avenue Bridge," *The Sun* (Baltimore, MD), June 1, 1896.

coursed, rock-faced limestone for the remainder. The bridge superstructure contains the asphalt-paved West North Avenue roadway. The substructure spans over the MDOT MTA light-rail tracks, CSX railroad tracks, Amtrak railroad tracks, the Jones Falls, and Falls Road on the middle level, with the B&P Tunnel at the lowest level. The seven arched openings at the central level are unevenly sized and spaced. The four west portals are 27'-0" wide and are clustered in pairs—the first two carrying the light-rail tracks (formerly used by the NCR) and the second two carrying CSX tracks (formerly used by the B&O Railroad). The twin portals are identical with paired segmental arches lined by unevenly sized voussoirs. The tunnel arches are constructed of brick covered with a thin concrete veneer. Seen at ground level inside the four western tunnels are arches that support the B&P Tunnel below. The three eastern arched openings are 130'-0" wide and span, from west to east, Amtrak railroad tracks (formerly used by the PRR), the Jones Falls, and Falls Road. Each of these large arched barrels are skewed and constructed of coursed red brick ribs that fan out to form a stepped surface. The arches rest on large stone piers. At the lowest level of the bridge, between the fourth and fifth arched openings of the middle level, is the southeast portal of the B&P Tunnel. The portal extends at grade with the other Amtrak tracks beyond the south face of the bridge at an angle, jutting out from the bridge. The arched portal is lined by irregularly spaced voussoirs. An original cast-iron balustrade runs atop the concrete parapets stamped with the dates 1976 and 1977, with the exception of small sections on the north and south sides that contain solid metal panels. The deck accommodates wide, two-level, concrete sidewalks on both the north and south sides and five lanes of vehicular traffic separated by a Jersey barrier. The westbound lanes contain two through vehicle lanes and a protected bicycle lane. The eastbound lanes contain three through vehicle lanes.¹⁵

C. Mechanicals/Operation: Not applicable.

D. Site Information: The North Avenue Bridge is in a heavily developed urban area and is bounded by the Jones Falls Expressway (Interstate 83) to the southwest, various railroad junctions to the south, the Howard Street Bridge to the southeast, the Baltimore & Ohio Railroad Baltimore Belt Line Bridge over Jones Falls Valley to the northeast, and the North Avenue Light Rail Station to the northwest.

Part III. Sources of Information

A. Secondary Sources:

Baltimore & Ohio Railroad Historical Society. "Belt Line Clearance Project." *The Sentinel* 6, no. 5 (September-October 1984): 7. Baltimore & Ohio Railroad Museum Collection, Baltimore, Maryland.

Bray, Matt, Nicole A. Diehlmann, Laura van Opstal, and Meghan P. White. "Howard Street Tunnel Project Architectural Historic Properties Identification and Effects Assessment Technical Report." Baltimore, MD: RK&K, 2021.

¹⁵ Culhane, "North Avenue Bridge," 1, IV-14.

Culhane, Kerri. "North Avenue Bridge (SHA No. BC1208)." Maryland Inventory of Historic Places Record B-4521. Crownsville, MD: Maryland Historical Trust, 1999.

Harwood, Herbert H., Jr. *Royal Blue Line*. Baltimore and London: Johns Hopkins University Press, 1990. Reprinted 2002.

Lee, Lawrence J. "Baltimore's Unseen Artery: A Brief History of the Baltimore Belt Railroad and its Howard Street Tunnel." In *Baltimore Civil Engineering History*, edited by Bernard G. Dennis Jr. and Matthew C. Fenton IV, P. E., 163-91. Reston, VA: American Society of Civil Engineers, 2004. doi:10.1061/40759(152)11.

Manning, M. Chris. "B&O Railroad Baltimore Belt Line." Maryland Inventory of Historic Properties Record B-5287. Crownsville, MD: Maryland Historical Trust, 2015.

White, Meghan P., and Nicole A. Diehlmann. "Baltimore & Ohio Railroad, Baltimore Belt Line." HAER No. MD-203. Historic American Engineering Record (HAER), National Park Service, U.S. Department of the Interior, 2022.

B. Likely Sources Not Yet Investigated: Interstate Commerce Commission (ICC) valuation records may exist for this structure. These records are held by the National Archives and Records Administration.

Part IV. Figures

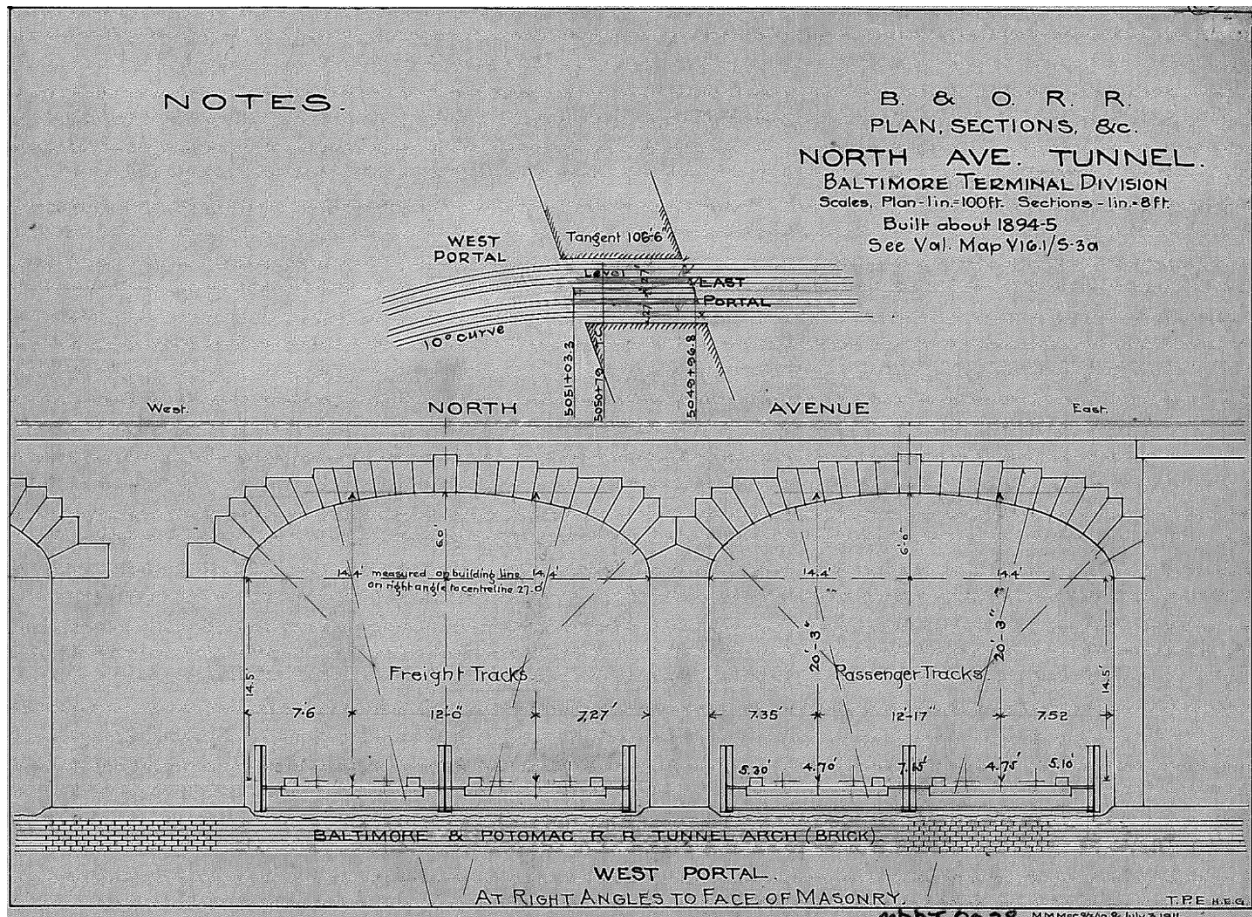


Figure 1a: Section drawings showing the B&O Railroad south portals, indicated in the image as the “west portal,” above the B&P Tunnel arch “B&O RR Plan, Sections, &c. North Ave. Tunnel,” 1905 (annotated in 1905, 1910, and 1911). (Drawing courtesy of CSX Transportation.)

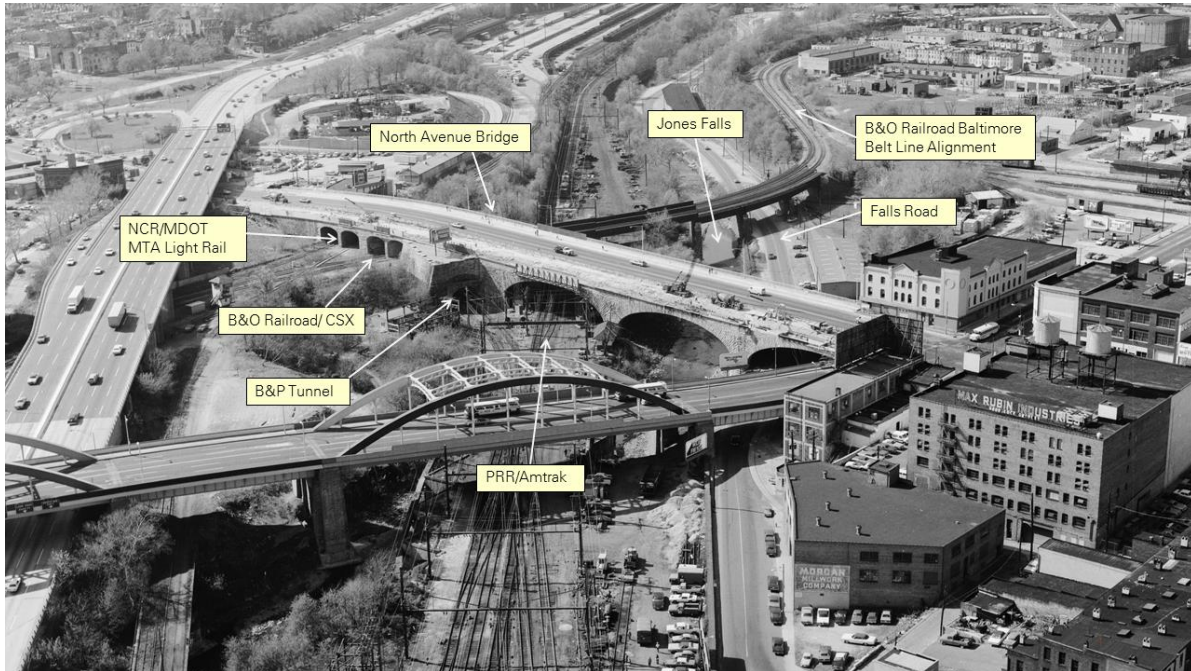


Figure 2: Annotated aerial view of the North Avenue Bridge, looking northwest, 1977. (Historic American Engineering Record, HAER MD-45, from Library of Congress.)



Figure 3: North Avenue Bridge, B&P Tunnel southeast portal (left) and south elevation of the arch over Amtrak tracks (center), 2010. (Photo courtesy of Amtrak.)

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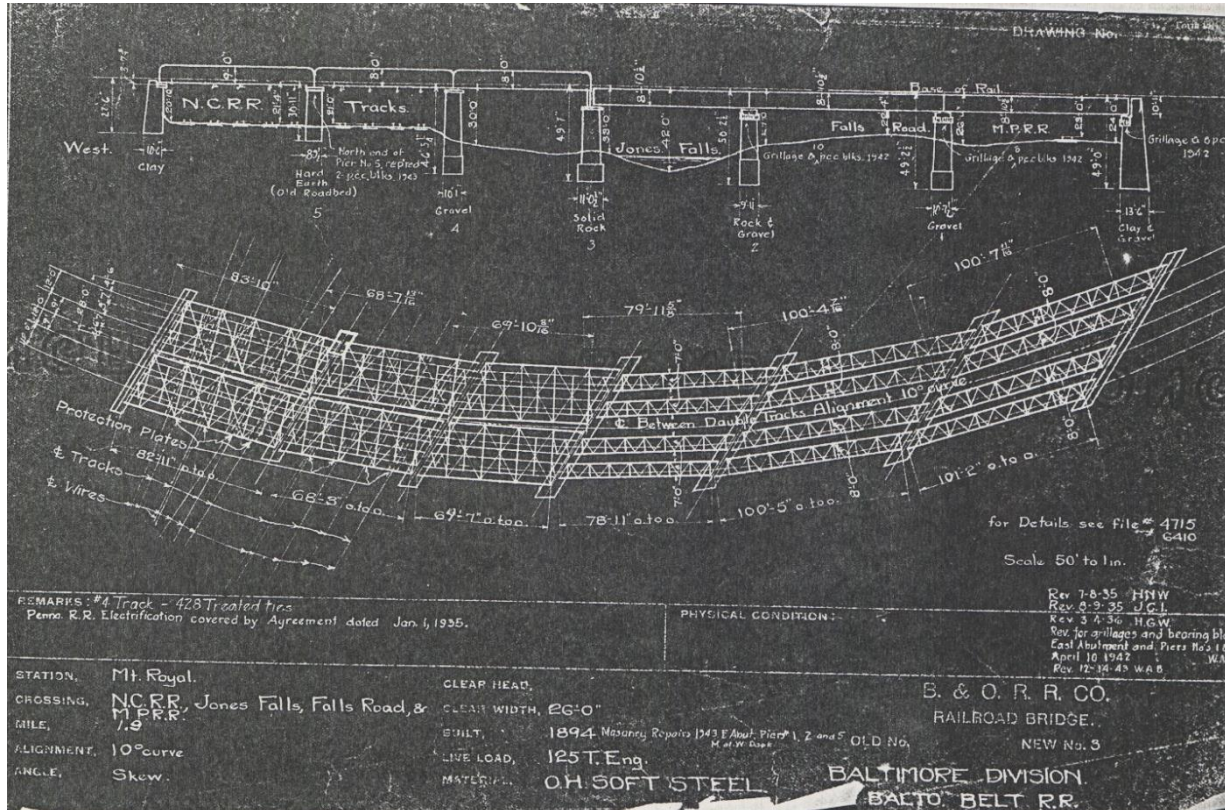


Figure 4: Section and plan of the North Avenue Bridge, n.d. (annotated in 1935, 1936, 1942, and 1943). (Drawing courtesy of B&O Railroad Historical Society.)



Figure 5: North Avenue Bridge, B&O Railroad Portals, looking north, ca. 1930. (Photo courtesy of B&O Railroad Historical Society.)



Figure 6: North Avenue Bridge, B&O Railroad Portals, looking north, 1966.
(Photo courtesy of B&O Railroad Historical Society.)

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Jet Lowe, photographer, November 2021

MD-203-A-1	View southeast along W. North Avenue from the intersection with McMechen Street toward the western end of the North Avenue Bridge. The Interstate 83 overpass is overhead.
MD-203-A-2	View west along W. North Avenue from the south sidewalk, showing the original cast iron balustrades on both sides of the North Avenue Bridge deck. The Interstate 83 overpass is visible in the distance.
MD-203-A-3	View east from midspan on the south sidewalk of the North Avenue Bridge, showing the original cast iron balustrades. The Amtrak railroad tracks leading to the Baltimore & Potomac Tunnel are visible below. The N. Howard Street bridge is visible in the distance to the southeast.
MD-203-A-4	View east along W. North Avenue toward the eastern end of the North Avenue Bridge. N. Howard Street intersects in the distance. Note the bi-level sidewalks and original cast iron balustrade along the south side of W. North Avenue.
MD-203-A-5	View west along W. North Avenue from the intersection with N. Howard Street toward the eastern end of the North Avenue Bridge. Note the bi-level sidewalks on the south side of W. North Avenue.
MD-203-A-6	Detail view of the original cast iron balustrade atop the concrete parapet built between 1976 and 1977, taken from the north side of W. North Avenue at the east end of the North Avenue Bridge. The cast iron balustrade was removed, refinished and replaced when the concrete parapets were added to the bridge.
MD-203-A-7	View north from the west end of the North Avenue Bridge showing the CSX railroad tracks and the Baltimore & Ohio Railroad Baltimore Belt Line Bridge over Jones Falls Valley.
MD-203-A-8	View southeast from atop the North Avenue Bridge showing the CSX railroad tracks below. The Interstate 83 bridge is visible in the distance.

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MD-203-A-9	Exterior view of the north portals of the first and second arched openings (west to east) carrying the MDOT MTA light rail tracks under the North Avenue Bridge. View is looking southeast. Note the concrete parapet with original cast-iron balustrade and metal safety fencing above the portals.
MD-203-A-10	Exterior view looking north showing the south portals of the third and fourth arched openings (west to east) carrying the CSX railroad tracks under the North Avenue Bridge and a partial view of the south portal of the second arched opening carrying MDOT MTA light rail tracks.
MD-203-A-11	Exterior view looking north showing the south portal of the third arched opening and a partial view of the south portal of the fourth arched opening (west to east) carrying the CSX railroad tracks under the North Avenue Bridge. The Baltimore & Ohio Railroad Baltimore Belt Line Bridge over Jones Falls Valley is visible in the distance.
MD-203-A-12	Interior view of the west tunnel wall of the third arched opening (west to east) carrying the CSX railroad tracks under the North Avenue Bridge. Note the utility bracket applied to the wall. The view is looking west toward the first and second arched openings that carry the MDOT MTA light rail tracks.
MD-203-A-13	Exterior view looking south showing the north portals of the third and fourth arched openings (west to east) carrying the CSX railroad tracks under the North Avenue Bridge.
MD-203-A-14	Interior view looking east from inside the tunnel at the third arched opening (west to east), showing the east CSX tunnel wall and the top of the Baltimore & Potomac Tunnel arch.
MD-203-A-15	View northwest along Falls Road toward the south façade of the North Avenue Bridge, showing the sixth and seventh arched openings (west to east), over the Jones Falls and Falls Road, respectively.
MD-203-A-16	View northwest from Falls Road toward the south façade of the North Avenue Bridge, showing the sixth arched opening (west to east), over the Jones Falls.
MD-203-A-17	Exterior view looking south showing the skewed arch of the seventh arched opening (west to east), over Falls Road.
MD-203-A-18	Interior view looking south showing the seventh arched opening (west to east) carrying Falls Road under the North Avenue Bridge. Note the red brick ribs forming the structure of the arch interior. The N. Howard Street bridge is visible in the distance.

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View southwest toward the north façade of the North Avenue Bridge, showing the sixth arched opening (west to east), over the Jones Falls, and the fifth arched opening, carrying the Amtrak tracks under the bridge.

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